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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/754,491	01/09/2004	David W. Gohl	163.1847US01	6176
43896	7590	12/14/2006	EXAMINER	
ECOLAB INC. MAIL STOP ESC-F7, 655 LONE OAK DRIVE EAGAN, MN 55121			DOUYON, LORNA M	
			ART UNIT	PAPER NUMBER

1751

DATE MAILED: 12/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/754,491

Applicant(s)

GOHL ET AL.

Examiner

Lorna M. Douyon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,6,10-21 and 23-34 is/are pending in the application.
- 4a) Of the above claim(s) 23-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2, 4, 6, 10-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 13, 2006 has been entered.
2. Claims 1-2, 4, 6, 10-21, 23-34 are pending. Claims 23-34 are withdrawn from consideration as being drawn to nonelected claims.
3. The rejection of claims 1-2, 6, 12, 13, 15, 20 and 21 under 35 U.S.C. 102(b) as being anticipated by Ruck (US Patent No. 4,388,077) is withdrawn in view of Applicants' amendment.
4. The rejection of claims 1-2, 6, 9-13, 15-21 under 35 U.S.C. 103(a) as being unpatentable over Barnes (US Patent No. 4,988,363) is withdrawn in view of Applicants' amendment.

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5. The rejection of claims 1-2, 6, 11-13, 15-16, 20-21 under 35 U.S.C. 103(a) as being unpatentable over Macbeath (US Patent No. 5,716,923) is withdrawn in view of Applicants' amendment.

6. The rejection of claims 3-4 under 35 U.S.C. 103(a) as being unpatentable over Barnes or McBeath as applied to the above claims, and further in view of Reinwald et al. (US Patent No. 4,118,189) is withdrawn in view of Applicants' amendment.

7. The rejection of claim 14 under 35 U.S.C. 103(a) as being unpatentable over Barnes or McBeath as applied to the above claims, and further in view of Werdehausen et al. (US Patent No. 3,718,597) is withdrawn in view of Applicants' amendment.

8. The rejection of claims 16-19 under 35 U.S.C. 103(a) as being unpatentable over MacBeath as applied to the above claims, and further in view of Barnes) is withdrawn in view of Applicants' amendment.

Specification

9. The disclosure is objected to because of the following informalities: It is suggested that the copending application on page 22, line 22 (please see amendment dated June 14,2006) be updated as to its corresponding Publication Number.

Appropriate correction is required.

Claim Objections

10. Claim 12 is objected to because of the following informalities: the limitations of claim 12 is already in claim 1, to which this claim is dependent upon. Appropriate correction is required. .

Claim Rejections - 35 USC § 112

11. Claims 1-2, 4, 6, 10-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is indefinite in the recital of "second pH...thereafter at a first pH" in lines 6-7 because the second pH occurs first and to state the second pH first as opposed to "a first pH" is contrary to the usual numbering and is confusing.

Claim 10 depends from cancelled claim 9.

Claims 2, 4, 6, 11-21, being dependent upon claim 1, are rejected as well.

Claim Rejections - 35 USC § 102

12. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

13. Claims 1-2, 4, 10-13, 15, 20 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Cornelissens (GB 2,000,177).

Cornelissens teaches a detergent composition containing (a) one or more surfactants, (b) at least 5% by weight of an alkali metal carbonate, and (c) 5-30% by weight of an acid, and (b) and (c) are separate, component (c) having a higher rate of solubility in a wash liquor than the alkaline component which is present in excess, component (c) dissolving so that the wash liquor has a pH of 2.0 to 5.0 before its temperature reaches 25°C, any alkaline material hardly dissolving before the temperature of the wash liquor reaches 40°C, and dissolving before the wash liquor reaches 60°C, and imparting a pH of from 9.0 to 10.5 (see abstract). Another category of materials that may be incorporated into the acidic constituent are percompounds such as peroxides, which have an optimum bleaching effect at a pH lower than that at which the detergent composition displays optimum cleaning action (see page 2, lines 60-62). After the acidic constituent has dissolved, the pH of the wash liquor may, during the acid phase of the washing process, rise to a maximum value of 6.5 to 7.0, wherein this increase in pH is caused by the gradual dissolution of the precipitated carbonates (see page 2, line 65 to page 3, line 4). Preferably, the alkaline constituent, for example, sodium carbonate, is provided with a coating (see page 3, lines 14-20; 43-45; 54-57). The alkaline constituent may contain one or more usual detergent components such as surfactants, builders, bleaching agents, fluorescent brighteners and perfumes (see page 3, lines 21-24). The washing cycle in the automatic washing machine, is understood, to inherently have a draining and rinsing cycles. Cornelissens, teaches the limitations of the instant claims. Hence, Cornelissens anticipates the claims.

Claim Rejections - 35 USC § 103

14. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cornelissens as applied to the above claims.

Cornelissens teaches the features as described above. Cornelissens, however, fails to specifically disclose the recited time while at the first and second pH.

It would have been obvious to one of ordinary skill in the art at the time the invention was made that the duration while at the acidic and alkaline pH range would reasonably be within the time as those recited in the claim because Cornelissens teaches that the acidic component dissolves first and the dissolution of alkaline component which has a coating is delayed.

15. Claims 1-2, 4, 6, 12, 13, 15, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ruck (US Patent No. 4,388,077) in view of Reinwald et al. (US Patent No. 4,118,189), hereinafter "Reinwald".

Ruck teaches a method for washing fabric which comprises washing the fabric in an aqueous washing solution containing an amphoteric surfactant which, in the washing solution changes from an anionic state to a cationic state in response to a decrease in the solution pH, a builder to give an initial solution pH which ensures that the surfactant is in the anionic state, and a pH builder which dissociates at the initial solution pH to form an acid, which acid reduces the solution pH causing the surfactant to change to the cationic state (see col. 2, lines 42-52). The composition also includes one or more acid and/or alkaline builders to give an initial washing solution pH which ensures that the amphoteric surfactant is initially in its anionic state, preferably the builder is chosen

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to give an initial pH in the range of about 7.1 to 8.0 units (see col. 2, lines 10-17). Ruck also teaches washing denim garments with a washing composition for 6 minutes, cold water rinsed for 2 minutes and spun dry at high speed for 4 minutes, wherein when the composition was included in amounts of 3 lb/60 Imp. Gal., the initial solution pH was found to range from about 7.9 to 8.1 depending on the water hardness and the solution pH just prior to the rinse cycle ranged from about 6.4 to 6.8 (see col. 4, line 20 to col. 5, line 17). The washing composition comprises amphoteric surfactant such as Ammonyx 2000 - a distearylethylbenzyl ammonium chloride, sodium perborate, trisodium phosphate, carboxymethyl cellulose, sodium carbonate and optical brightener (see col. 4, lines 20-34). The draining step would be understood to have taken place prior to the cold water rinse. Ruck, however, fails to disclose the pH ranges, that is from "about 2 to about 6" to "about 7 to about 11", and washing the laundry with a detergent use solution from the laundry washing machine prior to the step of applying the detergent containing peroxyacid, or draining at least a portion of the detergent use solution from the laundry washing machine prior to the step of applying the detergent containing peroxyacid.

Reinwald teaches a washing process which can be carried out in several, preferably two steps, replacing the wash liquid in between and this method is recommended particularly for greatly soiled wash (see col. 4, lines 5-7). The first stage, the so-called pre-wash cycle, can be carried out in known manner which serves primarily to remove coarse soil, the prewash liquor is removed before the start of the main wash cycle (see col. 4, lines 7-18). The method is carried out by using

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conventional cleaning compositions which include bleaching agents and bleach activators (see col. 4, lines 38-48).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to subject the laundry of Ruck to a pre-wash cycle, remove the prewash liquor, prior to the main wash cycle because this would remove coarse soil as taught by Reinwald. With respect to the pH ranges, as the word "about" permits some tolerance (see *In re Ayers*, 69 USPQ 109, and *In re Erickson*, 145 USPQ 207), the upper limit of a pH of about 6 in the first given range reads on the about pH 7.1 of Ruck and the pH of about 7 in the second given range read on the pH of about 6.4 to 6.8 of Ruck. Even assuming the pH do not overlap, absent unexpected results, a *prima facie* case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties, see *Titanium MetalsCorp. of America v. Banner*, 778F.2d 775, 227 USPQ 773 (Fed. Cir. 1985). See MPEP 2144.05I.

16. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cornelissens, or Ruck in view of Reinwald, as applied to the above claims, and further in view of Werdehausen et al. (US Patent No. 3,718,597), hereinafter "Werdehausen".

Cornelissens, or Ruck in view of Reinwald teaches the features as described above. Cornelissens, or Ruck in view of Reinwald, however, fails to disclose a halogen bleach like chlorinated trisodium phosphate or sodium hypochlorite.

Werdehausen teaches the equivalency of alkali metal perborates and percarbonates with chlorinated trisodium phosphate or alkali metal hypochlorite as bleaching agents in a similar method (see claim 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the perborates or percarbonates of Cornelissens or Ruck in view of Reinwald with chlorinated trisodium phosphate or alkali metal hypochlorite because the substitution of art recognized equivalents as shown by Werdehausen is within the level of ordinary skill in the art.

17. Claims 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cornelissens, or Ruck in view of Reinwald as applied to the above claims, and further in view of Barnes.

Cornelissens, or Ruck in view of Reinwald teaches the features as described above. Cornelissens, or Ruck in view of Reinwald, however, fails to specifically disclose peroxyacids like peroxyoctanoic acid, or an activator.

Barnes teaches the features as described above. In particular, Barnes teaches the equivalency of perborates or percarbonates with organic peroxyacids (which are also activators), which include peroxyoctanoic acid, as bleaching agents (see col. 6, lines 30-35; see col. 5, lines 43-58).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the perborate or percarbonate of Cornelissens, or Ruck in view of Reinwald with organic peroxyacids like peroxyoctanoic acid because the

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substitution of art recognized equivalents as shown by Barnes is within the level of ordinary skill in the art.

Response to Arguments

18. Applicant's arguments filed November 13, 2006, 2006 have been fully considered but they are not persuasive.

With respect to the rejection based upon Ruch in view of Reinwald, Ruch in view of Reinwald in further view of Werdehausen or Barnes, as they apply to the present amended claims, Applicants argue that Applicants have amended claim 1 to include that a pH adjuster is added when applying a bleaching and antimicrobial composition to the laundry to increase the pH from the second pH to the first pH.

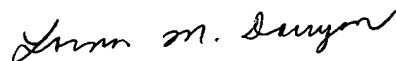
The Examiner respectfully disagrees with the above argument because in col. 2, lines 42-52 Ruch teaches the addition of a builder to give an initial solution pH and a pH builder which dissociates at the initial solution pH to form an acid.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lorna M. Douyon whose telephone number is 571-272-1313. The examiner can normally be reached on Mondays-Fridays 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on 571-272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Lorna M. Douyon
Primary Examiner
Art Unit 1751